

end coil support attached to and bracing said end section and being thermally isolated from said rotor core, wherein the end coil support attaches along a side of said coil end section parallel to a rotor axis and said end coil support is wider than a width of the coil end section and covers the side of the coil end section.

12. (Twice Amended) A method for supporting a super-conducting coil winding on a rotor core of a synchronous machine comprising the steps of:

- a. bracing an end section of the coil winding with an end coil support attached to at least one side of the end section parallel to a rotor core axis, wherein the end coil support is wider than the end section of the coil winding and covers the side of the end section;
- b. assembling the coil winding, end coil support and rotor core;
- c. attaching a rotor end shaft to said rotor core;
- d. thermally isolating the end coil support from the rotor core and shaft.

17. (Twice Amended) A rotor for a synchronous machine comprising:

a rotor core having at least one rotor core end orthogonal to a longitudinal axis of the rotor;

at least one end shaft attached to said rotor core end;

a race-track super-conducting (SC) coil winding extending around said rotor core and having a coil end section adjacent said rotor end;

a coil support brace attached to said coil end section and thermally isolated from said rotor core and rotor end shaft, wherein the coil support brace is affixed to a surface